

THE CLAIMS

1. A process for assembling wave-cut trash bags for overlapping dispensing including the steps of:

providing a flattened blown-film polymeric tube;

5 providing sets of closely spaced, parallel seals extending transversely across the entire width of the flattened blown-film polymeric tube at equally spaced intervals therealong;

10 providing a line of perforations extending transversely across the entire width of the flattened blown-film polymeric tube between the closely spaced, parallel seals comprising each set thereof;

15 providing a wave shaped line of perforations extending across the entire width of the flattened blown-film polymeric tube at a location equidistant from each of the closely spaced, parallel sets of seals;

folding the flattened blown-film polymeric tube axially into a multi-layer, fractional width configuration;

20 positioning a signal receiving target between the layers of the folded flattened blown-film polymeric tube;

directing a signal through the transversely extending line of perforations positioned between the closely spaced, parallel seals and through the perforations comprising the wave-cut line of perforations and thereby

locating each end of each trash bag comprising the flattened blown-film polymeric tube;

applying opposed axially directing forces to the flattened blown-film polymeric tube and thereby separating
5 the trash bags comprising the flattened blown-film polymeric tube at each of the transversely extending line of perforations positioned between the closely spaced, parallel seals;

following the separation step, positioning the
10 leading sealed end of the following trash bag comprising the flattened blown-film polymeric tube in an overlapping relationship with the trailing sealed end of the preceding trash bag comprising the flattened blown-film polymeric tube;

15 applying opposed axially directing forces to the flattened blown-film polymeric tube and thereby separating the trash bags comprising the flattened blown-film polymeric tube along each wave shaped line of perforations formed therein;

20 following the separating step positioning the leading wave-cut end of the following trash bag comprising the flattened blown-film polymeric tube in an overlapping relationship with the wave-cut trailing end of the

preceding trash bag comprising the flattened blown-film polymeric tube; and

5 rolling the trash bags comprising the flattened blown-film polymeric tube into a roll with the sealed end of each following trash bag in the roll overlapping the sealed end of each preceding trash bag in the roll and with the wave-cut open end of each following trash bag in the roll overlapping the wave-cut open end of the preceding trash bag in the roll.

10 2. The roll of trash bags constructed in accordance with claim 1.

 3. The process according to claim 1 wherein the step of directing a signal through the perforations formed in the flattened blown-film polymeric tube is carried out by
15 directing an electromagnetic beam through the perforations formed in the flattened blown-film polymeric tube.

 4. The process according to claim 1 wherein the step of directing a signal through the perforation formed in the flattened blown-film polymeric tube is carried out by
20 directing an electric spark through the perforations formed in the flattened blown-film tube.

5. The process according to claim 1 wherein the wave shaped lines of perforations which are formed in the flattened blown-film polymeric tube to define the open ends of the trash bags comprising the flattened blown-film polymeric tube are arranged in accordance with a predetermined pattern which eliminates force concentrations when the opposed axially directed forces are applied to the flattened blown-film polymeric tube to separate the trash bags comprising the flattened blown-film polymeric tube along the wave shaped lines of perforations formed therein.

6. The process according to claim 1 is further characterized by applying a predetermined electrostatic charge to the wave-cut ends of the trash bag comprising the flattened blown-film polymeric tube prior to the step of positioning the leading wave-cut end of the following trash bag in an overlapping relationship to the trailing wave-cut end of the preceding trash bag comprising the flattened blown-film polymeric tube.